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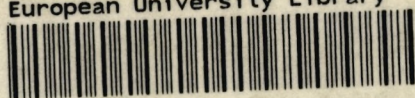
**Consumer, Social and Business Service Industries  
in the United States:  
Trends Between 1969 and 1987**

**JERRY A. JACOBS**

European University Institute, Florence



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**DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES**



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**JERRY A. JACOBS\***

\* This Working Paper has been written as a part of the research project on "Employment in Post Industrial Society"; project director: Prof. Gøsta Esping-Andersen.

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**Consumer, Social and Business Service Industries  
in the United States: Trends between 1969 and 1987**

by Jerry A. Jacobs

Department of Sociology  
University of Pennsylvania, Philadelphia

Abstract

This report presents detailed analyses of industrial shifts in the emerging service economy in the United States. After briefly defining the three different components of the service economy - social services, business services and consumer services - and describing the data employed, four sets of issues are examined. First, trends in employment by industry between 1969 and 1987 are documented. Second, the changing occupational composition of these industries is reported. Third, I explore changes in the demographic makeup of employment in each of these industries. Finally, I examine outcomes - in terms of earnings, employment security and stability, and career mobility.





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## 1. Defining Service Industries

While many analysts have discussed the expansion of the service economy as a whole, I maintain that it is important to distinguish between different components within this sector. In this study, I split the service economy into three parts: social services, consumer services, and business services. These distinctions are important conceptually because different forces are responsible for the growth of each of these industries. The growth of social services is inextricably linked to the politics of the public sector. The demand for consumer services, in contrast, is linked to demographic changes in households and families. Business services, finally, multiply in response to the changing structure of industrial organizations. As we will see, these divisions are also of substantive importance, in that these industries differ sharply on earnings, education, employment security and stability, and career mobility.

One principal goal of this paper, then, is to explore differences among these three service industries. Yet a second level of complexity emerges when we consider the position of each of these industries relative to a natural comparison group. I suggest below that consumer services can be fruitfully compared with retail sales, social services with public administration, and business services with manufacturing. Thus, throughout this paper, I make internal comparisons among the service industries and also compare each to its appropriate counterpart.

This draft does not include a review of the extensive relevant literatures. Rather, it reports the results of a large number of analyses so as to provide for the broadest possible set of comparisons between the United States and its post-industrial counterparts. Consequently, I proceed directly to discussing the data examined and the results obtained thus far.

## 2. Data and Methods

A sample of 127,125 individuals surveyed in the 1970 Census was assigned 1980 occupation and industry codes in conjunction with the 1980 Census (Priebe, 1985; see also Treiman, Bielby and Cheng, 1988.) This double coding enables a comparison of these data with those for pertaining to the late 1980's using the same (1980 Census) definitions of occupation and industry. These data obviate the need for imprecise adjustment of occupational and industry categories. Data for 1988 were obtained from the March 1988 Current Population Survey, a survey of 117,849 individuals.

For cross-sectional comparisons, the 1970 Census data are compared with the 1988 CPS data. The CPS can be utilized for short-term mobility analyses, as they include a one-year retrospective question concerning occupational and industrial mobility. For the mobility analyses, CPS data from 1971-1972 are compared with similar CPS data for 1987-1988. The analysis begins with a description of trends in employment by industry. A consideration of occupational shifts by industry is followed by tables on trends in industrial composition by sex, race, age and educational level.

For the analysis of earnings, the 1970 Census and 1988 CPS data sets were merged in order to create a pooled cross-sectional time series (with two time points). The earnings measure employed is the total annual wage and salary earnings of the individual. (Note that industry differentials as well as the sex gap in earnings are somewhat larger for annual, as compared with hourly, earnings.) In the multi-variate analysis of earnings, the log of earnings is the dependent variable. The earnings apply to the previous-year, so that the 1988 data provide information on 1987 earnings, and the 1970 data provide information on 1969 earnings. For consistency, all reported data refer to 1969 and 1987 (except the mobility analyses, which compare 1971-72 with 1987-88). Individuals with zero or negative earnings, are excluded from the analysis.

\1/ This analysis examines whether industry differentials in earnings have changed during this period.

An examination of trends in employment security - unemployment and under-employment rates - follows. The analysis of employee turnover and employment



benefits - pensions and health care coverage - is included for 1987 only. A longitudinal comparison is not possible before 1980 for these topics.

### 3. Employment By Industry in 1987

[TABLE 1 ABOUT HERE]

Just under two-fifths of the United States labor force was employed in social services, business services and consumer services in 1987, as is indicated on Table 1 (compare with Esping-Andersen, 1990, 1991). \2/ Social services represented the largest segment of the service economy, with 19.77 percent of the labor force employed in this field. Business services came next, with 12.24 percent, followed by consumer services at 7.39 percent employment. When the three groups are combined, services have substantially surpassed manufacturing in employment, which represented just under one-quarter (24.61 percent) of employment in 1987. Even when mining and agriculture employment are added to manufacturing, this combination of primary and secondary production still represented less than a third of the contemporary labor force. The balance of the economy was employed in retail sales (17.90 percent), wholesale trade (3.85 percent), utilities and transportation (6.69 percent), and government administration (3.79 percent). To summarize, at the present time, employment in the United States labor force is comprised of two-fifths services, one quarter manufacturing, and one quarter distribution (retail sales, wholesale trade, and transportation and utilities), with the remaining 7 percent divided between government administration (other than the provision of services), agriculture and mining.

One of the principal findings of our research is that employment in consumer services resembles retail sales in many key respects, while differing substantially from both social services and business services. In short, our findings indicate that consumer services and retail sales, together comprising one quarter of U. S. employment in 1987, represent the bottom end of the

emerging service economy. In contrast, social services and business services, together representing nearly one-third of employment in the United States do not represent the specter of deteriorating employment opportunities that some pessimists ascribe to service employment. Moreover, the social services resemble public administration more than they do business services. Consequently, a potentially more useful summary of employment by industry in the United States would be as follows: one-quarter social services (including public administration), one-quarter retail distribution (consumer services and retail sales), one quarter manufacturing, one tenth business services, one-tenth wholesale distribution (wholesale trade, transportation and utilities), with the remaining 4 percent divided between agriculture and mining. In the tables presented throughout this paper, data on all ten industries is presented separately. In addition to the comparison among the service industries, I frequently point to the comparison of consumer services and retail sales, social services and public administration, and business services and manufacturing.

#### 4. Growth and Decline of Industries, 1969-1987

How have these employment patterns changed since 1969? Table 1 presents changes in employment levels by industry for the entire experienced civilian labor force in both years, and then separately for part-time and full-time workers, and part-year and full-year workers. As is well known, the share of manufacturing employment declined sharply during this period, from over one-third to just under one quarter of the labor force. This decline, along with a slight loss of employment share in utilities and transportation, was matched by an increase in service and sales employment. Business services were the fastest employment gainers (up 4.70 percent), followed by social services (3.23 percent), retail sales (2.16 percent) and finally consumer services (0.74 percent). The growth in the more desirable sectors of the service economy (social and business services) was thus more than twice as large as



the growth in the less desirable retail sales and consumer service industries.

These changes are put into sharper relief when distinctions between part-time and full-time workers are introduced. Among full-time workers, the 7.19 percent decline in the share of manufacturing employment was more than off-set by the 8 percent growth in the share of social and business service employment. In contrast, retail sales and consumer service employment among full-time workers together grew less than 1 percent. Among part-time workers, the decline in manufacturing's share was even steeper (a loss of 12.54 percent), yet here it is the growth in retail sales (up 7.38) which offsets the majority of this decline. Business services (up 4.28 percent) and social services (up 2.78 percent) were the other principle growth areas among part-time workers.

The pattern for part-year workers resembles that for part-time workers, except for the decline in the share of part-year employment in social services. Among full-year workers, the nearly 10 percent decline in manufacturing employment was offset by the rise in social service (up 6.68) and business service (up 4.71 percent) employment.

These trends underscore the importance of distinguishing not only among the service industries but also separating marginal workers from full time workers. Social and business services have been the engine of employment growth among full-time and full-year workers, while retail sales and consumer services absorbed most of growth in part-time and part-year employment.

## 5. Occupations and Industries

One potential confusion which needs to be clarified at the outset is the distinction between service industries and service occupations. As used here, the term service industries include all employment in enterprises whose principal function is providing services. Service industries employ professionals, managers, and clerical workers as well as such service workers as repair technicians and bartenders. As we will see, only a part - albeit a

significant part - of service industry employment is comprised of service occupations.

[TABLE 2 ABOUT HERE]

Table 2 presents a cross-classification of industries and occupations for the United States labor force as of 1987. Not surprisingly, the occupational composition of industries varies widely. Over half of workers in the consumer service industry were employed in skilled and unskilled service occupations. One quarter of the retail sales industry was comprised service occupations and over 40 percent sales occupations. One-third of social service industry employment consisted of low status professionals; managers, professionals and technicians comprised over half of social service employment. One-fourth of public administrators worked in skilled service positions and another third in clerical jobs. One third of business services employees were managers and high status professionals, and one third were clerical workers. Three fifths of manufacturing employees were skilled and unskilled manual workers.

The occupational structure continued to edge slightly upward during the 1969-1987 period. All of the white collar occupations increased their share of employment, while all of the blue collar occupations lost employment share. Management (+2.82 percent) and professions and technicians (+2.51 percent) sales (+2.12 percent) and service (+1.44 percent) occupations grew, while skilled manual (-2.41 percent) and especially unskilled manual (-5.60 percent) occupations continued to decline.

The occupational makeup of individual industries reflected these economy wide shifts. In the consumer service industry, there was a 7.8 percent decline in the share of unskilled service employment, the majority of which was replaced by managers and professionals. Retail sales employed slightly more skilled service (+3.03 percent) and sales workers (+2.46) but slightly fewer unskilled manual (-2.81) and clerical workers (-1.65). In the social services, managers, high status professionals, technicians and clerical workers

increased employment share at the expense of lower status professionals and unskilled service workers. In public administration, managers and high status professionals gained, while unskilled service and manual employment declined. The share of unskilled manual employment in manufacturing declined, and was offset by the growth of managers and high status professionals. The pattern of occupational changes is somewhat less clear for part-time workers. Nonetheless, the largest declines were evident among skilled and unskilled manual workers.

The occupational data are consistent with the relatively optimistic view that expansion in the higher status components of the occupational structure will permit continued upward inter-generation and career mobility to overshadow downward mobility. The patterns of industry growth suggest a more mixed picture, since growth is evident both low-end (consumer service and retail sales industries) and medium- to high-end sectors (social and business services.) A third, more pessimistic view of the changing opportunity structure focuses on the stagnant and even moderately declining earnings opportunities, which I examine below. A complete appraisal of the dynamics of opportunity should ideally incorporate these partially disparate trends.

## 6. The Demographic Composition of the Service Economy

[TABLE 5 ABOUT HERE]

Service industry employment is disproportionately female. Each of the service industries surpassed in female representation the labor force as a whole, which in 1987 was 45 percent female (46.09 percent female in our CPS data). \3/ Social services were the most female-dominated sector, with women comprising 69.01 percent of employment. Business services, surprisingly, were slightly more female-dominated (55.54 percent) than consumer services (53.64 percent). The only other sector with an over-representation of women was retail sales, where 53.86 percent of workers were women. I was surprised to



find that women were slightly under-represented in government employment, with women representing only 41.18 percent of government workers (excluding social services personnel, many of whom work in the government.) The over-representation of women in the service industries is clear both for part-time and full-time workers.

As women's share of the labor force rose over 8 percent between 1969 and 1987, women's representation in all industries (except consumer services) rose as well. Yet, among the service industries, only in business services did women's over-representation increase. Indeed, the level of sex segregation across these 10 industries declined slightly, from 32.33 in 1969 to 30.74 in 1989 (see also Jacobs, 1991).

Two-thirds of part-time workers were women in 1987, up from 56.4 percent in 1969, yet the ratio of women's representation in part-time versus full-time work remained constant at 1.66. The decline in sex segregation was particularly sharp among part-time workers, where fewer than one-in-five women (18.52 percent) would have to change industries to be distributed in the same manner as men. Of course, within industries and even within firms, women and men remain highly segregated by occupation and job title. Yet there are reasons to believe that sex segregation has been declining when measured at these more detailed levels as well. \4/

[TABLE 6 ABOUT HERE]

Blacks were slightly over-represented in service sector industries. Blacks over-representation was greatest in public administration, where they represented 13.64 percent of employment (versus 10.26 percent in the labor force as a whole.) Blacks were slightly over-represented in consumer service employment (12.46 percent), social service employment (12.27 percent), but under-represented among retail sales and business service workers (8.61 and 9.08 percent, respectively.) The segregation of Blacks and Whites by industry was far less severe than the segregation of men and women. Racial segregation



declined for the labor force as a whole from 13.37 to 10.11 between 1969 and 1987, with an especially rapid decline in segregation among part-time workers (D fell from 25.37 to 6.98 in this time period.)

[TABLE 7 ABOUT HERE]

These patterns held for both Black men and Black women, as can be seen on Table 7. Black men, 9.45 percent of the male labor force, were slightly over-represented in social services (11.86 percent of these men were Black) and consumer services (10.41 percent) compared to men overall, but were under-represented in business services (8.08 percent) and retail sales (8.98 percent). The same patterns held for Black women relative to white women. The principal sex difference among Blacks found on Table 7 is that Black women were under-represented among part-time workers (in both 1969 and 1987) while Black men remained slightly over-represented among part-time workers.

[TABLES 8 - 10 ABOUT HERE]

## 7. Age Distribution

New entrants to the labor force (those aged 16-24) were over-represented in retail sales and consumer services in 1987, while being under-represented among business services, social services, and public administration. Young workers' over-representation in consumer services and retail sales increased substantially between 1969 and 1987, while the reverse trend was evident for business services, social services and public administration.

Retail sales was by far the share leader among young part-time workers, with consumer services a close third after agriculture. Among part-time workers, both consumer services and retail sales saw a 10 percent increase in the share of workers age 16-24 in this period.

At the other extreme of the age distribution, those aged 65 and over, a

more mixed pattern appears. Consumer services (but not retail sales) were over-represented among this age group, yet business services, public administration and social services were also over-represented. Among part-time workers, the same pattern held except for a deficit in social service jobs.

A particularly interesting group to examine is the 25-34 year olds. If individuals were increasingly unable to escape service sector employment, we would see a growing representation of workers in this age group in such jobs. There has been a small but disconcerting growth in the concentration of 25-34 year olds in low-end service employment. This age group remains under-represented in consumer service and retail sales jobs, but employment in these industries grew disproportionately for this age group between 1969 and 1987. This pattern held for both full-time and part-time workers, although full-time employment for this age group grew faster than part-time employment. In contrast, social services and public administration grew relatively slowly among this age group.

To summarize, employment in the low end of the service economy is disproportionately female, minority and young. These patterns are particularly evident among part-time workers, who comprise a substantial minority of consumer service and retail sales workers. In contrast, employment in the high end of the service economy is disproportionately female, but older, and, as we will see shortly, better educated.

The increasing concentration of the young in low-end service employment is crucial for our appraisal of the career dimension of service employment. The concentration of the young in low-end service jobs implies that such undesirable jobs are for many a way-station to other, more desirable positions rather than a final career destination. Clearly many individuals are able to escape the low-end trap by the time they are in their late thirties and early forties. Their ability to exit is undoubtedly conditioned by their educational attainment, sex, and race. A key question, then, is whether the rates of exit are increasing or decreasing over time, and for particular subgroups of the population.

One piece of bad news is that the share of low-end service jobs held by individuals 25-34 has increased disproportionately over the last 20 years. This implies that individuals have been increasingly unable to escape such low-end jobs by their late twenties and early thirties. More bad news is that poorly-educated individuals are increasingly concentrated in low-end service jobs, as is documented below. Thus these cross-sectional results hint at the possibility that mobility prospects out of low-end service economy employment may well be declining. However, data on mobility patterns, examined in Sections 15 and 16 below, do not corroborate this pessimistic inference as far as unskilled service occupations are concerned.

## 8. Education

[TABLES 11 - 13 ABOUT HERE]

The educational credentials of workers differed sharply among the service industries. Consumer service workers, followed closely by retail sales workers, were the workers most over-represented among high school dropouts of any industry in the economy outside agriculture. The same two fields also were over-represented among high school graduates, but were under-represented among those with 16 or more years of schooling. Social service workers, in contrast, had the highest level of schooling of any industry in the economy, being over-represented among both college graduates and those with post-graduate education. Highly educated workers were also over-represented in business services and public administration. This finding underscores the importance of differentiating consumer, business and social service industries in an analysis of employment trends. In most respects, consumer services look more like retail sales than like social and business services.

Between 1969 and 1987 the educational credentials of the United States labor force increased markedly, with the proportion of workers with less than a high school degree declining by more than half. During this time, the credentials of consumer services and retail sales workers increased, but at a slower rate than for the labor force as a whole. Thus, by 1987, those with a high school degree or less were more concentrated in these two fields than they were in 1969. In contrast, the concentration of highly credentialed workers increased in business services and public administration. Social service workers, already the most well-educated group in the labor force in 1969, also increased its representation among the most educated, but at a slightly slower rate than the general growth in the labor force.

The concentration of those with limited educational credentials among part-time workers increased during this period. For example, high school dropouts



were 1.86 times as likely to be working part time in 1987 as full time, while in 1969 this ratio was 1.30. A similar increased ratio was evident among high school graduates, while the representation among part-time workers of college graduates and those with post-graduate education declined during this period.

While less educated workers became increasingly concentrated in part-time employment, the relative educational levels of part-time workers across industries remained generally similar over this period.

To summarize, employees with no more education than a high school diploma comprised a much smaller portion of the United States labor force in 1987 than in 1969, due to the retirement of earlier cohorts with less education. Yet those with limited educational credentials became relatively worse-off, increasingly concentrated in low-end service jobs, jobs whose incomes fell during this period.

### 9. Earnings Trends

In this section I first present statistics comparing the earnings of service workers to those of others in the labor force. The following section examines the net differences between the service industries and others in earnings, once earnings-related characteristics are taken into account.

The average earnings of U. S. workers fell in real terms over the 1969 to 1987 period, since the nominal 252 percent increase percent did not keep pace with the 310 percent increase in the cost of living. This decline was due in part to the growing number of women and part-time workers in the labor force. As increasing numbers of relatively low-wage women join the labor force, real earnings fall. Yet even adjusting for the increasing presence of women and part-time workers in the labor force, the decline in real earnings persists for most groups.

[TABLES 14 - 16 ABOUT HERE]

Women working full time were the only group to have made real earnings gains during this period (their earnings rose 352 percent, a 13.5 percent real increase after inflation (Jacobs, 1991). Men working full time experienced an 8.4 percent decline in real earnings adjusted for inflation. The real losers during this period, however, were part-time workers, whose earnings in nominal terms only rose 16 percent. This change constitutes a decline in real earnings of 62.5 percent. Part-time men fared even worse, as their wage and salary income declined even in nominal terms. Their real earnings declined 71 percent, compared with a 46 percent decline in real earnings for part-time women. The plummeting wages of part-time workers deserve further scrutiny.

As we would expect, earnings levels differ sharply across service industries. Consumer services was the lowest-paid industry in the United States economy, followed closely by agriculture and retail sales. The annual earnings of workers in the consumer service sector in 1987 averaged \$10,525, compared with \$18,062 for the economy as a whole. Social service workers, despite their generally high level of education, earn almost exactly the economy-wide average (\$18,148). Business service jobs paid considerably more, (\$21,210), but lagged just behind manufacturing (\$21,321). The leading industries in terms of earnings were mining (\$27,969), utilities/transportation (\$24,726), and public administration (\$23,446).

The rank ordering of industries in terms of earnings shifted slightly between 1969 and 1987. Businesses services fell from the third to the sixth ranked industry in earnings, while retail sales nudged ahead of agriculture for eight position. More significant than the rank order findings are the change in the ratio of industry earnings to the national average. Consumer services and retail sales fell significantly behind during this period, falling from 70 and 78 percent of the national average to 58 to 61 percent, respectively. Social services maintained its position at parity with the national average, while public administration and business services inched ahead slightly.

The comparison of part-time and full-time workers complicates this picture

The decline in the relative wages of consumer services and retail sales reflect the losses suffered by full-time workers in these industries. Yet among part-time workers, consumer services and retail sales workers were closer to the national income average in 1987 than they were in 1969. As these change may reflect any number of factors - changing numbers of hours worked, the changing demographic composition of these industries, or shifts in the occupational distribution, etc. - I examine whether the overall decline in earnings in these industries persists in a multi-variate analysis.

[TABLE 17 ABOUT HERE]

#### 10. Multi-variate Analysis of Earnings

Table 17 presents the results of a series of regression equations which predict the earnings of labor force incumbents for a combined 1969-1987 sample. The strategy of these equations is to compare gross and net industry differentials, and to examine whether the relative earnings position of different industries remained constant over time. In our initial equation, the gross earnings differentials across industries, and the time-trend interactions are documented. These indicate the extent of positive or negative earnings changes in an industry relative to other industries, net of the overall change in earnings levels in the economy. In subsequent equations, I explore the extent to which these differentials can be attributed to various factors which differ across industries. Model 2 indicates the extent to which earnings differences across industries are due to the occupational composition of these industries. Model 3 adds demographic characteristics - sex and race. Model 4 adds education, and finally Model 5 adds age, hours and weeks worked. Manufacturing served as the reference category, with mining and agriculture excluded from this analysis.

The results in Model 1 document the earnings disadvantage of consumer service, retail sales and social service workers relative to workers in the



rest of the economy. A further important result in Model 1 is that the relative position of consumer services and retail sales declined notably compared with other industries between 1969 and 1987. Thus, not only are these low-end industries growing in size, but they are falling behind in terms of income compared to the rest of the economy. Business services declined slightly in relative terms, while public administration improved its relative position slightly.

In Model 2 occupational characteristics are added. The reference category here is unskilled manual workers. The relative disadvantage of consumer services is partly offset (explained) by the addition of occupational controls, but for retail sales, business services and especially social services, occupation suppresses the net effect of industry. In other words, these industries generally have higher status occupations than the economy as a whole, and when this fact is taken into consideration, the economic "cost" of being employed in these industries increases. (In Model 4, the addition of education to the analysis has a similar effect, reducing the negative coefficient on consumer services but increasing it on social and business services.)

In Model 3, the addition of race and sex terms reduces the net effect of industry location. In other words, some of the lower income of workers in the service economy is "due" to the fact that these jobs disproportionately employ Blacks and especially women. In Model 5, the addition of age, age squared, hours worked and weeks worked substantially attenuates the negative service industry wage effects. Further, the comparison of models demonstrates that much of the lag in earnings of consumer services and retail sales is due to the increasing number of individuals who work short hours in these fields. Nonetheless, wage penalties associated with consumer services, retail sales, and social services persist after these controls are introduced.

The problem with low-end service employment, then, is not only that these undesirable jobs proliferated during the last 20 years, but that their position relative to employment in other industries deteriorated.



[TABLE 18 ABOUT HERE]

11. Unemployment and Underemployment Rates

Of the many rewards of work besides earnings, employment security is certainly an important one. One desirable feature of service employment is its relative degree of insulation from sharp cyclical fluctuations which beset durable goods manufacturing and construction. I consequently expected that service industry jobs would have lower rates of unemployment than other industries. During the expansionary phase of the business cycle examined here, consumer services and retail sales indeed had slightly lower unemployment rates than manufacturing, but nonetheless exceeded the economy-wide average. Social services, public administration and business services, all had substantially lower unemployment than that found in manufacturing. Social services and public administration had similar rates of employment, while business services had a lower unemployment rate than manufacturing. Unemployment rates were higher among part-time workers than among full-time workers, but the pattern of inter-industry differences was similar for part-time and full-time workers. Industry differentials in unemployment were generally similar in 1972, although the unemployment rate for part-time workers increased notably in several industries. A complete examination of the issue of cyclicity would require an examination of periods of both growth and recession.

[TABLE 19 ABOUT HERE]

A more complete indication of the scope of unemployment should include a measure of under-employment. Over 9 percent of the employed workers in the United States in 1987 reported that they were involuntarily working part-time, which represented a marked increase from 1972. Of part-time workers, over one in five (20.97 percent) reported that they were involuntarily working on a

part-time basis. The levels of involuntary part-time work were highest in consumer services (15.02 percent) and retail sales (11.71). This pattern reflects the high concentrations of part-time workers in these industries, not a higher rate of involuntariness among part-time workers in these industries. The rate of involuntary part-time work was quite low in business services, social services, and public administration. For under-employment as for the case of unemployment, social services and public administration had similar low rates, while business services had lower under-employment rates than manufacturing.

One might be surprised that many respondents who are full-time workers by our definition (35 hours plus) report that they are involuntarily working part time. This may reflect some response error, but it also may reflect the respondents preference for working more hours than were made available to them. It should be somewhat reassuring that the reported rate of involuntary part-time work is far lower among full time (6.32 percent) than among part-time workers (20.97 percent). The apparent increase in involuntary part-time work is another potentially important finding which warrants further scrutiny.

[TABLE 20 ABOUT HERE]

## 12. Employment Stability

American workers change firms frequently. Much of this change is voluntary, and thus turnover does not constitute as extreme a social problem as unemployment. Nonetheless, high turnover rates are likely to be associated with low levels of employer investments in their workers, high rates of periodic frictional employment, gaps in of pension and other benefit coverage, and repeated periods of stressful probationary employment. High firm turnover rates, then, are another important indicator of undesirable employment.

Nearly one in six (16.09) workers in the U. S. reported changing employers at least once during 1987. Consumer services and retail sales had the highest

rates of employer changes of any industry, with about one in five workers changing employers in the preceding year. Not surprisingly, public administration had the lowest rate of employer shifts. Business services have a slightly higher rate of employee turnover than the economy-wide average, and are consistently higher than manufacturing. The rates of employer shifts were substantially higher among part-time (22.01 percent) than full-time workers (14.72 percent). Consumer services and retail sales maintain their leading position in turnover among part-time employees, but the inter-industry differential is somewhat narrower. (The comparison of 1987 with earlier years is not provided on Tables 20- 22. Data for these comparisons is not available for turnover, pensions, and health coverage.)

[TABLES 21 AND 22 ABOUT HERE]

### 13. Fringe Benefits: Health Care and Pensions

Since the United States does not have universal health insurance, employer-based health coverage is a crucial element of financial security for American families. While most full-time jobs offer such protection, most part-time jobs do not. Consumer services and retail sales lag far behind other industries (except agriculture) in the provision of such coverage for both full-time and part-time workers. Surprisingly, neither social service workers nor business service workers were as well protected as manufacturing workers, especially among part-time employees. Not surprisingly, public administrators were the most completely covered of any group, but even here, nearly half of part-time workers lacked employee-based health care.

Just over two in five (41.05 percent) U. S. workers had employer-sponsored pensions in 1987. Consumer services and retail sales lag far behind most other industries (other than agriculture) in pension coverage. The coverage remained remarkably low even for full time employees. Only one in six consumer service



workers and one in four retail sales employees was covered by a pension. Public administrators and social service employees are disproportionately covered, while business services lag both the economy average and even behind manufacturing.

[TABLES 23 AND 24 ABOUT HERE]

#### 14. Occupational and Industrial Mobility

For the mobility analysis, I switch to Current Population Survey data from 1971-72 to compare with 1987-88 because these data include a comparable one-year retrospective occupation and industry question. Using these data required translating the occupational and industry coding scheme into the 1970 codes. I estimate over 95 percent accuracy in this matching process (based on an analysis of the 1970 Census data, for which both sets of codes were available.)

Occupational mobility may be measured at many different levels of aggregation. Here I present two such measures - the rate of changing one's detailed occupation and the rate of changing one's major occupational category. The former refers to the U. S. census 3-digit codes, with some 400 occupations included in this list, while latter refers to changing one of 11 major occupational categories devised for the comparative service economy project. The rate of occupational change is obviously higher the more detailed the measure. Between 1987 and 1988, 9.26 percent of American workers changed their detailed occupation, while 6.93 percent changed their major occupational category.

The rate of occupational mobility declined slightly between 1971-72 and 1987-88, from 10.39 to 9.26 percent, a small difference which may well reflect annual variability. The rate of change increased slightly for part-time workers, but fell slightly for full-time workers. The same pattern is true for change across 11 major occupational groups, although the rate of movement is



of course lower the coarser the aggregation.

The rate of occupational change is highest among consumer service and retail sales workers (only agricultural workers have a similar rate of occupational change). Social service workers and public administrators have among the lowest rates of occupational changes (in this case, transportation and utility employees are similar.) Business services are in the middle, but consistently higher than manufacturing. This pattern holds for both full-time and part-time work, and for both detailed and major occupational changes. Indeed, the same patterns hold for both detail and major industry changes as well.

The industry differentials were generally similar for the two periods. However, occupational mobility rates increased for retail sales while declining for almost all other industries. This is because the rate of occupational mobility for part-time retail sales workers increased markedly. Among full-time retail sales workers, occupational mobility rates actually declined.

A similar general pattern is found for industrial mobility rates. There was a slight decline between 1971-72 and 1987-88, which characterized full-time but not part-time workers. Retail sales, consumer services and business services far surpassed other industries (except agriculture) in mobility rates, while public administration exhibited the lowest mobility rate. The relative position of industries (other than mining) remained constant during this period.

These summary mobility statistics of course do not indicate whether movement is up or down, nor do they provide any assurance that the moves are not simply temporary. Nonetheless, the mobility data indicate that the low-end of the service economy - consumer services and retail sales - are characterized by high rates of turnover which show no signs of declining during the 1970's and 1980's.

## 15. Summary

In the United States, consumer services and retail sales comprise the low end of the service economy. Together these industries increased their share of overall employment by three percent between 1969 and 1987, while their share of part-time employment grew by nearly eight percent. The industries were disproportionately, and increasingly, comprised of females, young employees, and those with limited educational credentials. Blacks are over-represented in consumer services but not in retail sales.

These jobs pay far less than the economy-wide average. This earnings deficit persists after basic productivity-related attributes (education, age, hours and weeks worked) are controlled. Further, the earnings gap between low-end service industries and the rest of the economy grew substantially between 1969 and 1987. The hardest hit were part-time workers, whose earnings fell dramatically behind the rest of the labor force.

A broader picture of the rewards of work indicate further problems with low-end service jobs. Their unemployment rates exceed the economy-wide average (although they were lower than manufacturing in 1987), and consumer service and retail sales workers are more likely than other workers to report they are under-employed. Such jobs have low levels of health and pension coverage, especially among part-time employees. This sector of the economy is characterized by high rates of employer turnover, and occupational and industrial mobility.

Happily, the higher end of the service economy - social and business services - grew more rapidly than the low end, especially among full-time workers. Women are disproportionately found in these jobs, along with older and better educated workers. Because social service workers are so well educated their earnings are right at the economy-wide average, although their are lower than they would be in other comparable jobs. Business service workers are not underpaid after other factors are controlled.

These analyses offer many lines of inquiry which might be fruitfully pursued. Most of the tables document the gross differentials across industries. The earnings analysis examines both gross and net differentials as

well as time trends. The most obvious extension of this analysis would be to extend the strategy employed in the earnings analysis to other outcomes - unemployment and under-employment rates, pension and health-care coverage and career mobility rates. Unfortunately, data limitations restrict the time period possible for the pension and health-care analyses to the 1980's. Further, utilizing data on a longer time period would help to provide a firmer answer to the question of the career prospects of unskilled service workers. Overall, this draft provides a broad spectrum of results on the U. S. economy which will facilitate fruitful comparisons between the United States and other post-industrial economies.



## Endnotes

1. In 1988, 2.6 percent of managers earned the top amount allowed in the coding scheme (\$99,999). The overwhelming majority of these were men. These individuals likely earned more than \$99,999, and consequently this figure was adjusted upward to correct for the bias imposed by this "top-coding" procedure.
2. The technical term is the experienced civilian labor force, which refers to all civilians who have worked before and who are employed or looking for work.
3. Official statistics are based on annual averages, while our analysis reflects data from a single, albeit quite large, monthly survey.
4. While the level of sex segregation varies with the precision of measurement, the direction of change is typically the same regardless of the aggregation of the data. See Jacobs and Lim, 1988, and Jacobs, 1989, for evidence of this empirical generalization.

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Table 1. Employment Trends By Industry, By Full-Time and Full-Year Status, 1969-1987

## A. Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	7.39	17.90	19.77	3.79	12.24	24.61	3.85	6.69	3.13	0.63	80,949
1969	6.65	15.74	16.54	3.75	7.54	33.37	4.31	7.69	3.62	0.79	126,585
Change	+0.74	+2.16	+3.23	+0.04	+4.70	-8.76	-0.46	-1.00	-0.49	-0.16	

## B. Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	12.50	32.78	24.53	1.84	10.70	8.59	1.98	3.13	3.82	0.15	21,674
1969	11.90	25.40	21.75	1.75	6.42	21.13	2.57	4.35	4.43	0.29	18,981
Change	+0.60	+7.38	+2.78	+0.09	+4.28	-12.54	-0.59	-1.22	-0.61	-0.14	+2,693

## C. Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	5.98	13.79	18.46	4.33	12.66	29.04	4.37	7.67	2.94	0.76	78,333
1969	5.41	13.47	15.32	4.22	7.80	36.23	4.72	8.48	3.43	0.91	81,025
Change	+0.57	+0.32	+3.14	+0.11	+4.86	-7.19	-0.35	-0.81	-0.49	-0.15	-2,692

## D. Part Year (Less than 50 Weeks)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	10.31	23.63	19.03	2.06	11.10	22.36	2.64	4.38	4.10	0.40	31,183
1969	8.53	18.66	22.76	1.91	6.51	29.32	3.03	5.38	3.31	0.59	33,355
Change	+1.78	+4.97	-3.73	-0.15	+4.59	-6.96	-0.39	-1.00	+0.79	-0.19	-2,172

## E. Full Year

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	6.07	15.30	20.11	4.58	12.76	25.63	4.40	7.73	2.69	0.73	68,823
1969	5.70	14.27	13.43	4.67	8.05	35.40	4.95	8.85	3.78	0.89	66,653
Change	+0.37	+1.03	+6.68	-0.09	+4.71	-9.77	-0.55	-1.12	-1.09	-0.16	+2,170



Table 2. Occupational Distribution of Employment By Industry, 1969-1987

	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
<b>1. Managers</b>											
1987	9.19	5.83	7.73	11.22	16.47	9.18	7.10	8.67	2.40	9.19	8.94%
1969	6.08	6.43	4.97	7.77	13.38	5.27	9.54	4.60	0.66	5.40	6.13%
Change	+3.11	-0.60	+2.76	+3.45	+3.09	+3.91	-2.44	+4.07	+1.74	+3.79	+2.81%
<b>2. Professions - High</b>											
1987	5.01	1.93	11.30	14.07	14.16	7.66	2.26	7.93	2.30	14.38	7.88%
1969	3.62	2.03	10.52	12.49	11.97	6.08	2.66	5.51	2.36	8.90	6.40%
Change	+1.39	-0.10	+0.78	+1.58	+2.19	+1.58	-0.40	+2.42	-0.06	+5.48	+1.48%
<b>3. Technicians</b>											
1987	0.42	0.23	3.96	3.82	3.54	3.26	0.86	2.95	0.76	5.41	2.53%
1969	0.24	0.09	2.95	3.40	3.24	2.99	0.61	1.57	0.31	2.80	2.07%
Change	+0.18	+0.14	+1.01	+0.42	+0.30	+0.27	+0.25	+1.38	+0.45	+2.61	+0.46%
<b>4. Professions - Low</b>											
1987	7.95	0.09	33.89	2.90	0.86	0.19	0.14	0.30	0.00	0.00	7.60%
1969	7.34	0.12	38.24	1.51	0.73	0.14	0.09	0.27	0.02	0.10	7.03%
Change	+0.61	-0.03	-4.35	+1.39	+0.13	+0.05	+0.05	+0.03	-0.02	-0.10	+0.57%
<b>5. Skilled Service</b>											
1987	24.65	10.10	5.65	24.16	1.03	1.14	1.87	8.05	0.89	4.08	6.72%
1969	24.04	7.07	3.90	25.04	0.95	1.00	2.18	9.58	0.96	4.50	5.59%
Change	+0.61	+3.03	+1.75	-0.88	+0.08	+0.14	-0.31	-1.53	-0.07	-0.42	+1.13%
<b>6. Unskilled Service</b>											
1987	30.65	17.85	15.34	5.51	9.99	3.79	5.20	9.02	12.96	2.76	12.08%
1969	38.47	17.73	18.06	7.50	7.09	4.32	6.17	8.73	5.92	2.40	11.77%
Change	-7.82	+0.12	-2.72	-2.09	+2.90	-0.53	-0.97	+0.29	+7.04	+0.36	+0.31%
<b>7. Clerical</b>											
1987	7.82	7.24	19.05	32.45	33.82	9.17	17.44	27.47	3.84	14.72	15.97%
1969	6.22	8.89	18.02	33.33	41.50	9.96	20.50	31.97	1.16	9.80	15.94%
Change	+0.98	-1.65	+1.03	-0.88	-7.68	-0.79	-3.06	-4.50	+2.68	+4.92	+0.03%
<b>8. Sales</b>											
1987	4.97	42.48	0.68	0.85	15.44	3.19	40.60	4.23	0.43	1.91	12.70%
1969	4.77	40.02	0.80	1.08	16.13	3.22	30.11	2.00	0.48	0.80	10.58%
Change	+0.20	+2.46	-0.12	-0.23	-0.69	-0.03	+10.49	+2.23	-0.05	+1.11	+2.12%
<b>9. Skilled Manual</b>											
1987	4.09	2.62	1.16	2.89	2.37	28.47	4.25	8.63	0.62	13.08	9.25%
1969	4.40	3.19	1.52	3.97	2.91	26.85	7.62	10.62	0.41	18.40	11.66%
Change	-0.31	-0.57	-0.36	-1.08	-0.54	+1.62	-3.37	-1.99	+0.21	-5.32	-2.41%
<b>10. Unskilled Manual</b>											
1987	5.05	11.60	1.22	2.11	2.27	33.69	20.04	22.76	2.88	34.45	13.93%
1969	4.70	14.41	0.90	3.87	2.00	39.70	20.41	25.15	2.75	46.90	19.53%
Change	+0.35	-2.81	-0.32	-1.76	+0.27	-6.01	-0.37	+0.61	+0.13	-12.45	-5.60%
<b>11. Farm/Other</b>											
1987	0.20	0.02	0.03	0.02	0.06	0.27	0.24	0.00	72.92	0.00	2.40%
1969	0.13	0.02	0.12	0.04	0.12	0.48	0.11	0.01	85.97	0.00	3.30%
Change	+0.07	+0.00	-0.09	-0.02	-0.06	-0.21	+0.13	-0.01	-12.45	+0.00	-0.90%

Table 3. Occupational Distribution of Employment for Part-Time Workers By Industry, 1969-1987

	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
<b>1. Managers</b>											
1987	3.22	1.28	2.83	11.01	7.11	5.20	3.95	3.27	0.91	17.76	3.171
1969	1.62	1.35	2.17	9.98	7.23	2.28	3.93	1.67	0.19	7.25	2.331
Change	+1.60	-0.07	-0.66	+1.03	-0.12	+2.92	+0.02	+1.60	+0.72	+10.51	+0.841
<b>2. Professions - High</b>											
1987	4.93	1.02	5.20	8.06	8.45	4.33	1.50	5.36	1.88	13.90	3.941
1969	4.09	1.18	5.58	9.98	6.71	4.01	2.13	7.17	1.22	2.90	3.881
Change	+0.84	-0.16	-0.38	-1.92	+1.74	+0.32	-0.63	-1.81	+0.66	+11.00	+0.061
<b>3. Technicians</b>											
1987	0.25	0.12	3.81	2.17	1.74	0.98	0.61	0.84	0.69	5.79	1.391
1969	0.11	0.05	2.61	2.61	2.21	2.12	0.49	0.84	0.00	1.45	1.301
Change	+0.14	+0.07	+1.20	-0.44	-0.47	-1.14	+0.12	-0.34	+0.69	+4.34	+1.091
<b>4. Professions - Low</b>											
1987	13.42	0.11	33.23	0.43	1.62	0.37	0.61	0.02	0.00	0.00	10.101
1969	12.02	0.20	40.93	2.14	1.24	0.10	0.16	0.49	0.00	0.00	10.561
Change	+1.40	-0.09	-7.70	-1.71	+0.38	+0.27	+0.45	-0.47	+0.00	+0.00	-0.461
<b>5. Skilled Service</b>											
1987	18.44	9.28	10.67	7.82	0.31	0.23	0.32	10.53	0.46	0.00	8.581
1969	16.91	4.06	5.75	9.74	0.65	0.46	0.98	15.82	0.66	1.45	5.341
Change	+1.53	+5.22	+4.92	-1.92	-0.34	-0.23	-0.66	-5.29	-0.20	-1.45	+3.161
<b>6. Unskilled Service</b>											
1987	38.66	26.26	19.14	18.24	20.20	4.35	7.79	11.39	16.78	3.47	22.101
1969	47.96	25.20	20.34	19.24	12.17	4.51	5.90	8.55	9.31	4.35	19.571
Change	-9.30	+1.06	-1.20	-1.00	-8.03	-0.16	-1.89	-2.84	+7.47	-0.88	+2.531
<b>7. Clerical</b>											
1987	8.95	5.92	22.09	48.91	38.77	18.56	32.89	34.42	7.35	39.00	17.161
1969	5.11	8.12	20.27	41.09	48.57	11.54	35.25	34.97	1.51	11.59	15.871
Change	+3.84	-2.20	+1.82	+7.82	-9.80	+7.02	-2.36	-0.55	+5.84	+27.41	+1.291
<b>8. Sales</b>											
1987	5.66	42.22	0.81	0.87	16.06	5.99	26.95	7.66	0.67	0.00	17.821
1969	5.32	41.21	1.06	0.95	15.89	6.55	17.21	0.98	0.66	0.00	14.301
Change	+0.34	+1.01	-0.25	-0.08	+0.17	-0.56	+9.74	+6.68	+0.01	+0.00	+3.521
<b>9. Skilled Manual</b>											
1987	2.05	1.17	0.53	1.77	2.17	27.55	4.62	3.43	0.12	0.00	3.601
1969	2.54	1.61	0.62	2.14	2.47	23.07	7.05	4.32	0.47	14.49	6.341
Change	-0.49	-0.44	-0.09	-0.37	-0.30	+4.48	-2.43	-0.89	-0.35	-14.49	-2.741
<b>10. Unskilled Manual</b>											
1987	4.38	12.60	1.68	0.71	3.50	31.90	20.31	23.09	2.21	20.08	9.441
1969	4.33	17.00	0.63	2.14	2.86	44.44	26.39	24.85	3.39	56.52	16.631
Change	+0.05	-4.40	+1.05	-1.43	+0.64	-12.54	-6.08	-1.76	-1.18	-36.44	-7.191
<b>11. Farm/Other</b>											
1987	0.04	0.01	0.00	0.00	0.07	0.56	0.46	0.00	68.93	0.00	2.711
1969	0.00	0.02	0.04	0.00	0.00	0.91	0.49	0.00	82.60	0.00	3.901
Change	+0.04	-0.01	-0.04	+0.00	+0.07	-0.35	+0.03	+0.00	-13.67	+0.00	+1.191

Table 4. Occupational Distribution of Employment for Full-Time Workers, By Industry, 1969-1987

	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
<b>1. Managers</b>											
1987	12.64	8.82	9.53	11.24	18.66	9.51	7.50	9.26	2.93	8.73	10.53%
1969	8.38	8.67	5.90	7.56	14.56	5.67	10.25	4.94	0.80	5.26	7.02%
Change	+4.26	+0.15	+3.63	+3.68	+4.10	+3.84	-2.75	+4.32	+2.13	+3.47	+3.51%
<b>2. Professions - High</b>											
1987	5.05	2.52	13.53	14.77	15.49	7.93	2.36	8.21	2.46	14.41	8.97%
1969	3.38	2.41	12.17	12.74	12.98	6.37	2.73	5.31	2.70	9.34	6.99%
Change	+1.67	+0.11	+1.36	+2.03	+2.51	+1.56	-0.37	+2.90	-0.24	+5.07	+1.98%
<b>3. Technicians</b>											
1987	0.51	0.31	4.02	4.01	3.96	3.45	0.89	3.18	0.79	5.39	2.84%
1969	0.31	0.11	3.06	3.48	3.43	3.10	0.63	1.62	0.40	2.90	2.25%
Change	+0.20	+0.20	+0.96	+0.53	+0.53	+0.35	+0.26	+1.56	+0.39	+2.49	+0.59%
<b>4. Professions - Low</b>											
1987	4.79	0.08	34.13	3.19	0.68	0.17	0.08	0.33	0.00	0.00	6.91%
1969	4.92	0.08	37.34	1.45	0.63	0.14	0.08	0.25	0.03	0.11	6.20%
Change	-0.13	+0.00	-3.21	+1.74	+0.05	+0.03	+0.00	+0.08	-0.03	-0.11	+0.79%
<b>5. Skilled Service</b>											
1987	28.24	10.64	3.80	26.08	1.20	1.21	2.06	7.77	1.04	4.30	6.23%
1969	27.71	8.40	3.28	26.55	1.00	1.07	2.33	8.83	1.05	4.73	5.65%
Change	+0.53	+2.24	+0.52	-0.47	+0.20	+0.14	-0.27	-1.06	-0.01	-0.43	+0.58%
<b>6. Unskilled Service</b>											
1987	26.03	12.32	13.94	4.01	7.60	3.74	4.88	8.76	11.58	2.72	9.29%
1969	33.58	14.44	17.31	6.34	6.12	4.29	6.21	8.75	4.89	2.26	9.94%
Change	-7.55	-2.12	-3.37	-2.33	+1.48	-0.55	-1.33	+0.01	+6.69	+0.46	-0.65%
<b>7. Clerical</b>											
1987	7.16	8.11	17.94	30.52	32.66	8.40	15.51	26.71	2.58	13.41	15.64%
1969	6.80	9.22	17.28	32.56	40.14	9.74	18.63	31.61	1.05	9.67	15.96%
Change	+0.36	-1.11	+0.66	-2.04	-7.48	-1.34	-3.12	-4.90	+1.53	+3.74	-0.32%
<b>8. Sales</b>											
1987	4.57	42.65	0.63	0.84	15.30	2.96	42.30	3.85	0.34	2.02	11.28%
1969	4.49	39.50	0.71	1.10	16.18	2.77	31.75	2.13	0.43	0.86	9.71%
Change	+0.08	+3.15	-0.08	-0.26	-0.88	+0.19	+10.55	+1.72	-0.09	+1.16	+1.57%
<b>9. Skilled Manual</b>											
1987	5.27	3.57	1.39	3.02	2.42	28.54	4.21	9.20	0.80	13.79	10.81%
1969	5.36	3.89	1.81	4.15	2.99	27.37	7.69	11.37	0.40	18.69	12.91%
Change	-0.09	-0.32	-0.42	-1.13	-0.57	+1.17	-3.48	-2.17	+0.40	-4.90	-2.10%
<b>10. Unskilled Manual</b>											
1987	5.44	10.95	1.06	2.27	1.98	33.83	20.01	22.72	3.12	35.23	15.18%
1969	4.89	13.27	0.98	4.04	1.83	39.06	19.65	25.18	2.56	46.19	20.21%
Change	+0.55	-2.32	+0.08	-1.77	+0.15	-5.23	0.369	-2.46	+0.56	-10.96	-5.03%
<b>11. Farm/Other</b>											
1987	0.29	0.03	0.04	0.03	0.06	0.25	0.21	0.00	74.36	0.00	2.31%
1969	0.20	0.01	0.15	0.05	0.14	0.42	0.06	0.01	85.69	0.00	3.16%
Change	+0.09	+0.02	-0.11	-0.02	-0.08	-0.17	+0.15	-0.01	-11.33	+0.00	-0.85%



Table 5. Women's Employment Trends By Industry, By Full-Time Status, 1969-1987

## A. Percent Female, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	53.64	53.86	69.01	41.18	55.54	27.03	29.79	27.46	22.90	20.64	46.09%
1969	56.21	47.30	63.87	33.08	45.61	24.92	24.00	21.08	10.53	7.30	37.83%
Change	-2.57	+6.56	+5.14	+8.10	+9.93	+2.11	+5.79	+6.38	+12.37	+13.34	+8.26%

## B. Percent Female, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	67.80	66.73	81.65	65.66	70.64	41.90	59.61	49.75	36.85	64.09	66.97%
1969	72.79	61.16	75.38	59.62	61.06	34.22	45.79	38.24	16.81	10.14	56.40%
Change	-4.99	+5.57	+6.27	+6.04	+9.58	+7.68	+13.82	+11.51	+20.04	+53.95	+10.57%

## C. Percent Female, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	45.45	45.40	64.37	38.31	52.01	25.81	26.06	24.95	17.89	18.30	40.32%
1969	47.67	41.18	60.04	30.50	42.64	23.65	21.21	19.02	8.64	7.09	33.49%
Change	-2.22	+4.22	+4.33	+7.81	+9.37	+2.16	+4.85	+5.93	+9.25	+11.21	+6.83%

Table 6. Black's Employment Trends By Industry, By Full-Time Status, 1969-1987

## A. Percent Black, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	12.46	8.61	12.27	13.64	9.08	9.62	6.86	13.90	5.50	2.07	10.26%
1969	20.13	6.38	10.39	8.55	5.19	8.55	5.50	10.56	9.97	3.30	9.06%
Change	-7.67	+2.23	+1.88	+5.09	+3.89	+1.07	+1.34	+3.36	-4.47	-1.23	+1.20%

## B. Percent Black, Part-Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	12.61	8.18	8.39	10.42	8.65	8.52	7.10	11.67	7.54	0.00	8.96%
1969	24.59	4.26	7.35	10.21	5.71	9.24	6.47	12.81	14.65	7.25	9.50%
Change	-11.98	+3.92	+1.04	+0.21	+2.94	-0.72	+0.63	-1.14	-7.11	-7.25	-0.54%

## C. Percent Black, Full-Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	12.37	8.89	13.70	14.02	9.18	9.71	6.83	14.16	4.77	2.18	10.62%
1969	17.83	7.32	11.40	8.39	5.08	8.46	5.38	10.28	8.55	3.01	8.96%
Change	-5.46	+1.57	+2.30	+5.63	+4.10	+1.25	+1.45	+3.88	-3.78	-0.83	+1.66%

Table 7. Black Employment Trends By Industry, By Sex and Full-Time Status, 1969-1987

## A. Percent Black (Of Men), Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	10.41	8.98	11.86	13.23	8.08	8.75	6.78	12.85	6.22	1.94	9.45%
1969	10.67	6.71	7.90	7.30	5.05	8.34	5.52	10.37	8.95	3.24	7.95%
Change	-0.26	+2.27	+3.96	+5.93	+3.03	+0.41	+1.26	+2.48	-2.73	-1.30	+1.50%

## B. Percent Black (Of Men), Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	10.88	9.83	12.52	16.98	9.89	10.22	9.14	12.92	10.57	0.00	10.70%
1969	12.47	5.36	6.84	8.82	6.00	9.67	7.76	14.71	13.21	6.45	8.86%
Change	-1.59	+4.47	+5.68	+8.16	+3.89	+0.55	+1.38	-1.79	-2.64	-6.45	+1.84%

## C. Percent Black (Of Men), Full-Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	10.25	8.64	11.74	12.99	7.82	8.66	6.61	12.84	5.02	1.99	9.26%
1969	10.19	7.10	8.12	7.21	4.92	8.18	5.33	9.97	7.77	3.01	7.81%
Change	+0.06	+1.54	+3.62	+5.78	+2.90	+0.47	+1.28	+2.87	-2.75	-1.02	+1.45%

## D. Percent Black (Of Women), Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	14.24	8.29	12.46	14.23	9.88	11.98	7.06	16.70	3.08	2.58	11.21%
1969	27.50	6.02	11.79	11.08	5.35	9.21	5.42	11.25	18.63	4.11	10.88%
Change	-13.26	+2.27	+0.67	+3.15	+4.53	+2.77	+1.64	+5.45	-15.55	-1.53	+0.33%

## E. Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	13.44	7.35	7.46	6.99	8.14	6.16	5.71	10.41	2.35	0.00	8.10%
1969	28.12	3.56	7.52	11.16	5.53	8.41	4.95	9.75	21.79	14.29	9.99%
Change	-15.68	+3.79	-0.06	-4.17	+2.61	-2.25	+0.76	+0.66	-19.44	-14.29	-1.89%

## F. Full-Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	14.93	9.20	14.78	15.68	10.43	12.75	7.45	18.12	3.63	3.07	12.64%
1969	26.22	7.63	13.58	11.06	5.30	9.36	5.56	11.62	16.78	3.03	11.24%
Change	-11.29	+1.57	+1.20	+4.62	+5.13	+3.39	+1.89	+6.50	-13.15	-0.04	+1.40%



Table 8. Age Distribution of Employment By Industry, 1969-1987

## A. Percent Aged 16-24, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	25.87	38.67	12.64	9.62	16.66	14.80	15.27	10.48	25.43	5.88	19.50%
1969	19.09	28.88	18.53	12.20	21.41	15.91	16.21	15.54	16.05	14.30	18.83%
Change	+6.78	+9.79	-5.89	-2.58	-4.75	-1.11	-0.94	-5.06	+9.38	-8.42	+0.67%

## B. Percent Aged 25-34, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	25.75	25.28	27.00	26.98	31.68	31.12	32.00	29.04	24.29	32.12	28.46%
1969	16.11	16.87	22.08	21.18	23.23	22.94	22.81	22.75	14.98	21.70	21.04%
Change	+9.64	+8.41	+4.92	+5.80	+8.45	+8.18	+9.19	+6.29	+9.31	+10.42	+7.42%

## C. Percent Aged 35-44, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	19.72	15.14	27.75	28.85	23.81	24.35	23.63	28.93	16.21	30.64	23.20%
1969	17.98	17.34	20.91	23.41	19.27	22.46	22.20	22.54	17.62	25.70	20.75%
Change	+1.74	-2.20	+6.84	+5.44	+4.54	+1.89	+1.43	+6.39	-1.41	+4.94	+2.45%

## D. Percent Aged 44-54, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	12.90	10.58	17.56	19.37	14.13	16.58	15.68	17.90	12.95	17.09	15.18%
1969	20.87	19.08	19.72	25.62	18.39	22.71	20.24	23.25	21.57	22.90	21.21%
Change	-7.97	-8.50	+2.16	+6.25	-4.26	-6.13	-4.56	-5.35	-8.62	-5.81	-6.03%

## E. Percent Aged 55-64, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	9.46	7.52	11.32	10.85	9.54	11.00	10.01	11.55	12.41	12.67	10.19%
1969	17.57	13.36	14.51	13.67	12.30	13.61	14.57	13.77	19.00	13.30	14.13%
Change	-8.11	-5.84	-3.19	-2.82	-2.76	-2.61	-4.56	-2.22	-6.59	-0.63	-3.94%

## F. Percent Aged 65+, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	6.30	2.81	3.73	4.33	4.18	2.16	3.41	2.11	8.70	1.60	3.47%
1969	8.38	4.47	4.25	3.92	5.40	2.37	3.97	2.15	10.78	2.10	4.04%
Change	-2.38	-1.66	-0.52	-0.41	-1.22	-0.21	-0.56	-0.04	-2.08	-0.50	-0.57%

Table 9. Age Distribution of Employment By Industry for Part-Time Workers, 1969-1987

## A. Percent Aged 16-24, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	36.46	60.10	23.35	23.60	25.31	31.40	31.79	28.42	41.77	13.51	38.95%
1969	25.52	50.27	27.94	20.76	26.08	23.41	30.92	26.49	29.79	11.59	32.11%
Change	+9.12	+9.83	-4.59	+2.84	-0.77	+7.99	+0.87	+1.93	+11.98	+1.92	+6.84%

## B. Percent Aged 25-34, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	16.81	14.96	23.45	13.71	20.03	18.70	18.78	21.59	10.33	39.00	18.25%
1969	13.23	11.16	20.38	16.95	19.35	19.77	15.95	21.79	7.06	13.04	16.34%
Change	+3.58	+3.80	+3.07	-3.24	+0.68	-1.07	+2.83	-0.20	+3.27	+25.96	+1.91%

## C. Percent Aged 35-44, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	14.25	8.69	22.57	15.94	18.76	17.13	13.24	18.95	7.36	14.29	15.08%
1969	13.79	12.18	19.01	20.05	15.88	18.72	16.28	17.75	11.36	30.43	16.02%
Change	+0.46	-3.49	+3.56	-4.11	+2.88	-1.59	-3.04	+1.20	-4.00	-16.14	-0.93%

## D. Percent Aged 44-54, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	10.69	5.88	12.49	12.13	11.28	10.60	11.02	11.51	9.91	16.22	9.65%
1969	17.59	10.97	14.89	18.85	12.88	19.60	13.98	18.43	15.15	11.59	15.28%
Change	-6.90	-5.09	-2.40	-6.72	-1.60	-9.00	-2.96	-6.92	-5.24	+4.63	-5.63%

## E. Percent Aged 55-64, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	9.75	6.10	10.28	12.25	11.28	12.19	12.49	13.53	13.41	3.47	9.40%
1969	16.54	8.95	10.30	12.41	12.03	12.63	12.34	11.23	16.79	21.74	11.73%
Change	-6.69	-2.85	-0.02	-0.16	-0.75	-0.44	+0.15	+2.30	-3.38	-18.27	-2.33%

## F. Percent Aged 65+, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricult. Other	Mining	Total
1987	12.05	4.28	7.86	22.36	13.34	9.97	12.67	6.00	17.21	13.51	8.65%
1969	13.34	6.47	7.48	10.98	13.79	5.88	10.53	4.32	19.86	11.59	8.52%
Change	-1.29	-2.19	+0.38	+11.38	-0.45	+4.09	+2.14	+1.68	-2.65	+1.92	+0.13%

Table 10. Age Distribution of Employment By Industry for Full-Time Workers, 1969-1987

## A. Percent Aged 16-24, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	19.75	24.57	8.70	7.98	14.64	13.44	13.20	8.46	19.56	5.47	14.12%
1969	15.97	19.84	15.44	11.37	20.52	14.93	14.36	14.23	12.22	14.50	15.83%
Change	+3.78	+4.73	-6.74	-3.39	-5.88	-1.49	-1.16	-5.77	+7.34	-9.03	-1.71%

## B. Percent Aged 25-34, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	30.93	32.07	28.31	28.54	34.40	32.14	33.66	29.88	29.31	31.75	31.29%
1969	17.51	19.28	22.63	21.59	23.97	23.35	23.67	22.87	17.19	22.34	22.11%
Change	+13.42	+12.79	+5.68	+6.95	+10.43	+8.79	+9.99	+7.01	+12.12	+9.41	+9.18%

## C. Percent Aged 35-44, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	22.88	19.38	29.65	30.37	24.99	24.94	24.93	30.05	19.39	31.52	25.44%
1969	20.02	19.52	21.53	23.73	19.92	22.94	22.95	23.11	19.36	25.35	21.82%
Change	+2.86	-0.14	+8.12	+6.64	+5.07	+2.05	+1.98	+6.94	+0.03	+6.17	+3.62%

## D. Percent Aged 44-54, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	14.18	13.68	19.42	20.22	14.80	17.07	16.27	18.62	14.04	17.13	16.71%
1969	22.47	22.51	21.31	26.28	19.44	23.12	21.02	23.83	23.36	23.74	22.55%
Change	-8.29	-8.83	-1.89	-6.06	-4.64	-6.05	-4.75	-5.21	-9.32	-6.61	-5.84%

## E. Percent Aged 55-64, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	9.29	8.54	11.71	10.68	9.13	10.90	9.70	11.32	12.06	13.16	10.41%
1969	18.07	15.22	15.89	13.80	12.35	13.74	14.86	14.08	19.62	12.67	14.67%
Change	-8.78	-6.77	-4.18	-3.12	-3.22	-2.84	-5.16	-2.76	76566	+0.49	-4.26%

## F. Percent Aged 65+, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	2.97	1.85	2.21	2.21	2.03	1.52	2.25	1.68	5.65	0.96	2.03%
1969	5.97	3.62	3.20	3.24	3.79	1.91	3.15	1.89	8.25	1.40	3.03%
Change	-3.00	-1.77	-0.99	-1.03	-1.76	-0.39	-0.90	-0.21	-2.60	-0.44	-1.00%

Table 11. Educational Distribution of Employment By Industry, 1969-1987

## A. Less Than High School

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	29.29	25.11	9.38	6.85	8.47	23.36	13.70	13.35	38.95	19.67	18.33%
1969	56.60	46.35	20.10	21.29	18.32	46.81	34.15	35.68	61.72	45.60	38.99%
Change	-27.31	-21.40	-10.72	-14.44	-9.85	-23.45	-20.45	-22.33	-22.77	-25.93	-20.66%

## B. High School Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	42.23	44.36	27.62	38.23	35.02	45.14	43.15	46.02	38.08	41.30	39.56%
1969	30.60	36.72	24.83	46.47	41.33	36.02	39.80	44.33	26.74	33.00	35.15%
Change	+11.63	+7.64	+2.79	-8.24	-6.31	+9.12	+3.35	+1.69	+11.34	+8.30	+4.41%

## C. Some College Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	18.51	20.89	20.27	28.37	25.38	16.77	23.66	23.95	14.19	16.67	20.49%
1969	9.53	12.50	16.12	18.11	21.41	10.10	16.46	14.74	7.37	10.90	13.13%
Change	+9.98	+8.39	+4.15	+10.26	+3.97	+6.67	+7.20	+9.21	+6.82	+5.77	+7.36%

## D. College Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	7.60	7.44	17.80	15.01	21.07	10.32	15.56	12.55	5.65	12.19	12.79%
1969	2.18	3.52	16.37	7.83	12.73	4.86	7.75	3.98	2.64	6.50	7.07%
Change	+5.42	+3.92	+1.43	+7.18	+8.34	+5.46	+7.81	+8.57	+3.01	+5.69	+5.72%

## E. Post-Graduate Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	2.37	2.19	24.93	11.54	10.06	4.41	3.92	4.13	3.13	10.16	8.84%
1969	1.09	0.91	22.59	6.30	6.21	2.21	1.83	1.26	1.53	4.00	5.66%
Change	+1.29	+1.28	+2.34	+5.24	+3.85	+2.20	+2.09	+2.87	+1.60	+6.16	+3.18%



Table 12. Educational Distribution of Employment By Industry for Part-Time Workers, 1969-1987

## A. Less Than High School, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987	39.16	36.99	14.01	17.62	17.65	32.35	27.06	21.79	52.48	15.06	28.69%
1969	64.50	56.57	24.35	29.22	28.75	56.58	43.53	39.77	75.79	62.32	48.04%
Change	-25.34	-19.58	-10.34	-11.60	-11.10	-24.23	-16.47	-17.98	-23.31	-47.26	-19.35%

## B. High School Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987	35.87	37.88	30.88	39.02	36.86	40.27	37.33	41.53	26.72	37.84	35.71%
1969	24.31	28.73	24.12	41.09	39.33	29.87	34.14	36.52	15.31	20.29	28.20%
Change	+11.56	+9.58	+6.76	-2.07	-2.47	+10.40	+3.19	+5.01	+11.41	+17.55	+7.51%

## C. Some College Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987	17.83	19.80	26.68	27.61	26.08	18.52	23.40	25.48	15.38	32.52	22.05%
1969	8.64	12.34	21.27	17.34	21.54	9.20	16.34	17.59	6.76	10.14	13.93%
Change	+9.19	+7.46	+5.41	+10.27	+4.54	+9.32	+7.06	+7.89	+8.62	+22.38	+8.12%

## D. College Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987	5.15	4.38	15.00	9.49	12.62	6.09	8.08	8.43	3.78	5.79	8.38%
1969	1.71	1.82	15.77	6.65	6.36	2.88	4.05	5.16	1.41	4.35	5.63%
Change	+3.44	+2.56	-0.77	+2.84	+6.26	+3.21	+4.03	+3.27	+2.37	+1.44	+2.75%

## E. Post-Graduate Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987	1.99	0.96	13.43	6.27	6.79	2.77	4.13	2.77	1.64	5.79	5.18%
1969	0.84	0.54	14.49	5.70	4.02	1.48	1.94	0.96	0.94	2.90	4.20%
Change	+1.15	+0.42	-1.06	+0.57	+2.77	+1.29	+2.19	+1.81	+0.70	+2.89	+0.98%

Table 13. Educational Distribution of Employment By Industry for Full-Time Workers, 1969-1987

## A. Less Than High School

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricul. Other	Mining	Total
1987	23.59	17.31	7.68	5.59	6.33	22.63	12.03	12.39	34.08	19.92	15.46%
1969	52.53	41.83	18.68	20.52	16.31	45.47	32.95	35.19	57.53	44.36	36.87%
Change	-28.94	-24.52	-11.00	-14.93	-9.98	-22.84	-20.92	-22.80	-23.45	-24.44	-21.41%

## B. High School Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricul. Other	Mining	Total
1987	45.91	48.61	26.42	38.14	34.59	45.54	43.87	46.53	42.16	41.48	40.62%
1969	33.84	40.25	25.06	47.00	41.71	36.86	40.52	45.27	30.20	33.94	36.78%
Change	+12.07	+8.36	+1.36	-8.86	-7.12	+8.68	+3.35	+1.26	+11.96	+7.54	+3.84%

## C. Some College Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricul. Other	Mining	Total
1987	18.90	21.61	17.91	28.46	25.21	16.63	23.69	23.77	13.77	15.66	20.05%
1969	9.99	12.56	14.41	18.18	21.39	10.23	16.48	14.40	7.56	10.96	12.93%
Change	+8.91	+9.05	+3.50	+10.28	+3.82	+6.40	+7.21	+9.37	+6.21	+4.70	+7.12%

## D. College Graduate

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricul. Other	Mining	Total
1987	9.02	9.46	18.83	15.65	23.05	10.66	16.50	13.02	6.32	12.54	14.01%
1969	2.41	4.28	16.56	7.95	13.95	5.13	8.23	3.84	3.01	6.66	7.41%
Change	+6.61	+5.18	+2.27	+7.70	+9.10	+5.53	+8.27	+9.18	+3.31	+5.88	+6.60%

## E. Post-Graduate Education

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transp.	Agricul. Other	Mining	Total
1987	2.59	3.01	29.16	12.16	10.82	4.54	3.90	4.28	3.67	10.40	9.85%
1969	1.22	1.08	25.29	6.35	6.63	2.31	1.82	1.30	1.70	4.08	6.00%
Change	+1.37	+1.93	+3.87	+5.81	+4.19	+2.23	+2.08	+2.98	+1.97	+6.32	+3.85%

Table 14. Earnings By Industry and Full-Time Status, 1969-1987

## A. Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$10,525	11,089	18,148	23,446	21,210	21,321	21,921	24,726	11,010	27,969	\$18,062
1969	\$5,046	5,602	7,174	8,141	8,167	7,536	8,232	7,861	5,881	8,524	\$7,164
Ratio	2.09	1.98	2.53	2.88	2.60	2.83	2.66	3.15	1.87	3.28	2.52

## B. Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$3,692	3,803	6,270	5,832	6,191	6,169	6,007	7,780	3,869	9,604	\$5,070
1969	\$2,645	2,574	4,305	5,356	5,166	5,814	4,782	5,818	3,714	6,766	\$4,360
Ratio	1.40	1.48	1.46	1.09	1.06	1.06	1.26	1.34	1.04	1.42	1.16

## C. Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$14,362	16,006	22,528	25,460	24,738	22,568	23,995	26,681	13,317	28,814	\$18,062
1969	\$5,778	6,433	7,891	8,359	8,641	7,737	8,577	8,072	6,303	8,649	\$7,634
Ratio	2.48	2.49	2.85	3.05	2.86	2.92	2.80	3.31	2.11	3.33	2.36

Table 15. Earnings By Industry, By Sex and Full-Time Status, 1969-1987

## A. Male, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$14,558	15,305	26,909	28,004	29,265	24,010	25,384	27,052	12,287	29,226	\$22,924
1969	\$7,021	7,368	10,983	9,362	11,034	8,572	9,372	8,598	6,064	8,810	\$8,729
Ratio	2.07	2.08	2.45	2.99	2.65	2.80	2.71	3.15	2.03	3.32	2.63

## B. Male, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$4,092	3,496	6,737	7,460	7,708	6,734	6,424	8,116	4,081	11,868	\$5,322
1969	\$3,956	3,171	6,653	7,106	7,552	7,049	6,162	7,137	3,886	7,158	\$5,959
Ratio	1.03	1.10	1.01	1.05	1.02	0.96	1.04	1.14	1.05	1.66	0.89

## C. Male, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$18,096	20,080	30,691	29,328	32,305	25,117	26,751	28,526	14,295	29,661	\$25,616
1969	\$7,539	8,069	11,663	9,454	11,428	8,724	9,596	8,718	6,455	8,922	\$9,044
Ratio	2.40	2.49	2.63	3.10	2.83	2.88	2.79	3.27	2.21	3.32	2.83

## D. Female, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$7,155	7,584	14,278	17,230	14,876	14,323	14,019	18,750	6,390	22,079	\$12,528
1969	\$2,903	3,228	4,795	5,355	4,392	4,195	4,275	4,871	3,350	4,857	\$4,200
Ratio	2.46	2.35	2.98	3.22	3.39	3.41	3.28	3.85	1.91	4.55	2.98

## E. Female, Part Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$3,505	3,950	6,167	4,991	5,584	5,413	5,722	7,440	3,506	7,689	\$4,950
1969	\$2,023	2,207	3,475	3,587	3,410	3,382	3,029	3,397	2,573	3,571	\$2,970
Ratio	1.73	1.79	1.77	1.39	1.64	1.60	1.89	2.19	1.36	2.15	1.67

## F. Female, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987	\$10,131	11,196	18,072	19,561	17,853	15,506	16,426	21,294	8,448	24,332	\$16,022
1969	\$3,337	3,692	5,212	5,622	4,611	4,337	4,546	5,166	3,710	5,000	\$4,551
Ratio	3.04	3.03	3.47	3.48	3.87	3.58	3.61	4.12	2.28	4.87	3.52



Table 16. Earnings By Industry, By Age Group, 1969-1987

## A. Age 16-24

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$5,113	5,032	6,567	10,270	9,474	10,060	9,086	10,888	4,250	14,657	\$7,009
1969	\$3,267	2,943	3,505	4,544	3,889	4,359	4,271	4,314	3,148	5,077	\$3,829
Ratio	1.57	1.71	1.87	2.26	2.44	2.31	2.13	2.52	1.35	2.89	1.83

## B. Age 25-34

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$12,684	14,026	16,596	21,861	20,299	20,483	21,218	22,715	12,673	27,051	\$18,207
1969	\$5,601	6,248	6,503	7,952	7,797	7,420	7,972	7,572	5,990	7,573	\$7,112
Ratio	2.26	2.24	2.55	2.75	2.60	2.76	2.66	3.00	2.12	3.57	2.56

## C. Age 35-44

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$13,734	16,637	21,415	27,255	27,397	24,763	26,245	28,338	15,046	29,793	\$22,928
1969	\$5,759	6,651	8,810	8,921	10,131	8,382	9,421	8,815	7,062	10,052	\$8,329
Change	2.38	2.50	2.43	3.06	2.70	2.95	2.79	3.21	2.13	2.96	2.75

## D. Age 45-54

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$13,864	17,023	22,924	28,062	26,100	26,710	28,251	29,558	14,855	32,232	\$23,814
1969	\$5,687	6,602	8,293	9,221	10,284	8,606	9,225	8,973	7,255	9,956	\$8,299
Change	2.44	2.58	2.76	3.04	2.54	3.10	3.06	3.29	2.05	3.24	2.87

## E. Age 55-64

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$11,375	13,653	20,691	23,790	23,659	23,842	24,515	26,045	13,288	28,070	\$20,692
1969	\$4,850	6,073	7,899	8,402	9,388	7,932	9,255	8,593	5,656	8,608	7,588
Change	2.35	2.25	2.62	2.83	2.52	3.01	2.65	3.03	2.35	3.26	2.73

## F. Age 65+

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transp.	Agricul. Other	Mining	Total
1987	\$5,896	8,220	13,096	14,171	14,011	14,210	16,290	18,573	8,758	14,874	\$11,733
1969	\$3,693	4,727	7,003	6,406	7,914	6,426	7,943	6,286	3,558	4,722	\$5,940
Change	1.60	1.74	1.87	2.21	1.77	2.21	2.05	2.95	2.46	3.15	1.98

Table 17. Determinants of Wages of By Industry, 1969-1987

Dependent Variable: Log of Annual Earnings

VARIABLE	Model 1 Beta (S.E.)	Model 2 Beta (S.E.)	Model 3 Beta (S.E.)	Model 4 Beta (S.E.)	Model 5 Beta (S.E.)
Intercept	1.752* (.011)	1.511* (.014)	1.659* (.014)	1.030* (.025)	-2.534* (.041)
Year	0.807* (.017)	0.764* (.016)	0.804* (.016)	0.733* (.016)	0.854* (.013)
Consumer Services	-0.477* (.034)	-0.449* (.034)	-0.315* (.033)	-0.292* (.032)	-0.214* (.026)
Retail	-0.366* (.023)	-0.404* (.024)	-0.314* (.023)	-0.307* (.023)	-0.191* (.018)
Social	-0.154* (.021)	-0.303* (.024)	-0.165* (.024)	-0.241* (.023)	-0.138* (.019)
Services	0.167* (.038)	0.072 (.038)	0.056 (.036)	0.010 (.036)	-0.037 (.028)
Public Admin.	-0.007 (.028)	-0.141* (.029)	-0.113* (.028)	-0.151* (.027)	-0.025 (.022)
Business Services	0.066* (.029)	0.037 (.028)	-0.020 (.027)	-0.027 (.027)	-0.025 (.021)
Wholesale	0.211* (.022)	0.253* (.022)	0.165* (.021)	0.152* (.021)	0.091* (.017)
Utilities/Transport	Trend Terms:				
Consumer Services	-0.586* (.048)	-0.564* (.046)	-0.580* (.044)	-0.584* (.044)	-0.297* (.035)
Retail	-0.534* (.033)	-0.460* (.032)	-0.427* (.030)	-0.422* (.030)	-0.140* (.024)
Social	-0.056* (.031)	-0.018 (.030)	-0.004 (.029)	0.033* (.029)	-0.014 (.023)
Services	0.122* (.059)	0.096 (.056)	-0.133* (.054)	0.143* (.054)	0.125* (.042)
Public Admin.	-0.113* (.040)	-0.086* (.038)	-0.027 (.037)	-0.017 (.036)	-0.027 (.029)
Business Services	Model 5 Continued				
Managers		1.016* (.024)	0.976* (.023)	0.780* (.024)	0.432* (.019)
Professions-High Status		0.954* (.025)	0.886* (.024)	0.596* (.025)	0.389* (.020)
Technicians		0.562* (.037)	0.540* (.036)	0.383* (.036)	0.250* (.028)
Professions-Low Status		0.502* (.029)	0.694* (.028)	0.414* (.029)	0.350* (.023)
Skilled Service		0.249* (.027)	0.241* (.026)	0.188* (.026)	0.040* (.020)
Unskilled Service		-0.108* (.022)	-0.040 (.021)	-0.061* (.021)	-0.047* (.017)
Clerical		0.069* (.020)	0.393* (.020)	0.268* (.020)	0.130* (.016)
Sales		0.367* (.023)	0.430* (.022)	0.293* (.022)	0.137* (.018)
Skilled Manual		0.402* (.020)	0.340* (.019)	0.299* (.019)	0.172* (.015)
Female			-0.678* (.013)	-0.644* (.013)	-0.458* (.010)
Black			-0.228* (.025)	-0.179* (.025)	-0.151* (.020)
Black Female			0.310* (.037)	0.280* (.037)	0.155* (.029)
Education				0.062* (.037)	0.053* (.002)
Adjusted R2	0.133	0.217	.273	.289	.556
* p<.05					
N of Cases	38,399				

Table 18. Unemployment By Industry, By Full-Time Status, 1969-1987

## A. Percent Unemployed, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	5.67	6.29	1.85	1.74	3.33	6.31	3.61	3.45	7.20	6.48	4.61%
1972	5.41	5.93	2.37	2.07	3.60	6.38	4.19	3.66	3.62	4.88	4.77%

## B. Percent Unemployed, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	7.44	7.76	2.82	4.64	4.88	8.93	7.72	7.73	8.87	10.00	5.83%
1972	4.30	6.68	3.39	1.16	4.48	9.61	3.93	6.11	3.99	20.00	5.43%

## C. Percent Unemployed, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	4.88	5.48	1.54	1.48	3.02	6.13	3.16	3.05	6.78	6.34	3.99%
1972	6.14	5.56	2.10	2.11	3.44	6.20	4.22	3.47	3.49	4.30	4.64%

Note: these unemployment rates are lower than official rates because they exclude respondents who did not report an industry. These rates refer to individuals employed in 1987 who were unemployed in 1988, rather than to the entire population of job seekers in 1988.

Table 19. Under-employment By Industry, By Full-Time Status, 1987

## A. Percent Under-employed, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	15.02	11.71	5.94	3.47	6.44	10.47	5.73	7.29	16.85	7.43	9.09%
1972	5.69	3.24	2.04	1.19	1.84	4.42	1.70	2.69	9.07	3.66	3.58%

## B. Percent Under-employed, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	25.88	19.41	14.48	24.05	20.07	36.65	15.09	29.46	25.36	30.00	20.97%
1972	9.44	5.21	4.96	12.79	4.31	12.71	7.30	10.31	12.14	13.33	7.31%

## C. Percent Under-employed, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	10.10	7.46	3.18	1.67	3.72	8.63	4.70	4.98	14.70	6.53	6.32%
1972	3.22	2.28	1.28	0.65	1.41	3.97	1.15	2.11	8.02	3.29	2.83%

Table 20. Employer Turnover By Industry, By Full-Time Status, 1969-1987

## A. Percent Changing Employers, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	19.42	21.02	15.32	10.92	16.44	14.10	15.65	12.48	16.55	16.09	16.07%

## B. Percent Changing Employers, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	21.61	25.19	20.34	20.35	19.96	21.18	21.29	20.13	19.00	22.22	22.01%

## C. Percent Changing Employers, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	18.46	18.78	13.72	10.12	15.75	13.62	15.05	11.72	15.94	15.86	14.72%

Note: these figures pertain to workers employed in both 1987 and 1988.

Table 21. Health-Care Coverage By Industry, By Full-Time Status, 1987

## A. Percent Changing Employers, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	31.20	37.55	61.26	78.60	59.79	69.40	67.29	74.12	20.93	79.87	57.82%

## B. Percent Changing Employers, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	15.32	18.02	37.44	53.18	34.87	46.95	43.70	53.62	12.39	63.95	32.40%

## C. Percent Changing Employers, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	42.41	52.27	72.31	84.20	67.98	75.42	73.17	79.50	26.35	83.85	68.28%



Table 22. Pension Coverage By Industry, By Full-Time Status, 1969-1987

## A. Percent Changing Employers, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	13.38	19.66	52.24	80.95	37.66	48.24	38.76	59.22	7.44	61.23	41.05%

## B. Percent Changing Employers, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	7.27	9.94	32.45	60.75	21.09	31.09	22.03	40.00	3.81	51.52	22.66%

## C. Percent Changing Employers, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac-turing	Whole-sale	Utility/Transpt.	Agricul. Other	Mining	Total
1987	17.70	26.98	61.42	85.41	43.11	52.84	42.93	64.26	9.74	63.66	48.60%

Table 23. Occupational Mobility By Industry, By Full-Time Status, 1987-1988

## A. Percent Changing Detailed Occupation, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	12.18	15.10	6.79	5.72	9.52	7.61	8.72	6.33	12.11	8.15	9.26%
1971-72	13.89	14.34	8.35	6.22	10.46	9.41	10.48	6.98	14.07	7.08	10.39%

## B. Percent Changing Detailed Occupation, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	14.92	18.94	11.21	13.72	13.76	12.03	13.31	14.32	15.61	16.67	14.76%
1971-72	14.44	15.97	11.41	13.04	14.87	13.98	17.07	11.25	18.20	14.55	14.23%

## C. Percent Changing Detailed Occupation, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	10.98	13.03	5.38	5.04	8.68	7.31	8.24	5.53	11.24	7.82	8.01%
1971-72	13.39	13.26	6.99	4.77	9.04	8.07	8.92	5.89	11.71	5.36	8.53%

## D. Percent Changing Major Occupational Category, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	9.91	11.59	5.06	4.40	6.75	5.48	5.59	4.69	10.40	4.07	6.53%
1971-72	10.97	11.58	6.26	4.31	7.57	6.54	7.08	5.01	12.41	4.11	7.80%

## E. Percent Changing Major Occupational Category, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	12.36	14.96	8.68	11.06	10.19	9.07	10.65	10.07	13.80	11.11	11.58%
1971-72	10.85	12.68	8.39	9.18	11.65	9.68	12.38	7.95	15.98	2.64	10.59%

## F. Percent Changing Major Occupational Category, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufacturing	Wholesale	Utility/Transpt.	Agricult. Other	Mining	Total
1987-88	8.83	9.77	3.91	3.84	6.07	5.24	5.06	4.15	9.56	3.81	5.86%
1971-72	11.09	10.86	5.32	3.28	6.26	5.62	5.83	4.26	10.36	4.45	6.63%

Table 24. Industrial Mobility By Industry, By Full-Time Status, 1987-1988

## A. Percent Changing Detailed Industry, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	12.33	14.30	7.24	5.44	10.25	7.24	9.66	6.43	11.79	7.54	9.25%
1971-72	14.06	14.57	8.34	6.54	11.64	10.22	11.74	7.17	13.46	6.83	10.83%

## B. Percent Changing Detailed Industry, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	14.92	17.77	11.61	14.16	14.75	11.47	15.97	14.09	15.38	16.67	14.61%
1971-72	13.98	16.17	11.15	13.93	16.66	14.38	18.92	11.39	17.42	13.24	14.40%

## C. Percent Changing Detailed Industry, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	11.18	12.43	5.84	4.70	9.37	6.95	9.00	5.67	10.91	7.19	8.03%
1971-72	14.13	13.52	7.10	4.97	10.03	9.00	10.05	6.09	11.20	5.36	9.37%

## D. Percent Changing Major Industrial Category, Total

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	11.19	9.92	4.49	5.10	7.86	4.61	8.98	5.70	10.90	7.54	6.81%
1971-72	12.47	10.73	5.73	6.33	9.70	5.68	10.83	6.63	12.94	6.58	7.92%

## E. Percent Changing Major Industrial Category, Part Time (Less Than 35 Hours)

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	13.71	11.33	7.44	14.16	11.90	9.07	15.59	12.75	14.03	16.67	11.19%
1971-72	12.09	11.23	7.66	13.63	14.48	8.69	18.65	10.72	16.64	13.24	10.76%

## F. Percent Changing Major Industrial Category, Full Time

Year	Consumer Service	Retail Sales	Social Service	Public Admin.	Business Service	Manufac- turing	Whole- sale	Utility/ Transpt.	Agricul. Other	Mining	Total
1987-88	10.08	9.17	3.54	4.32	7.06	4.30	8.28	5.00	10.12	7.19	5.93%
1971-72	12.83	10.40	4.87	4.78	8.16	4.80	8.99	5.58	10.82	5.06	6.77%







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